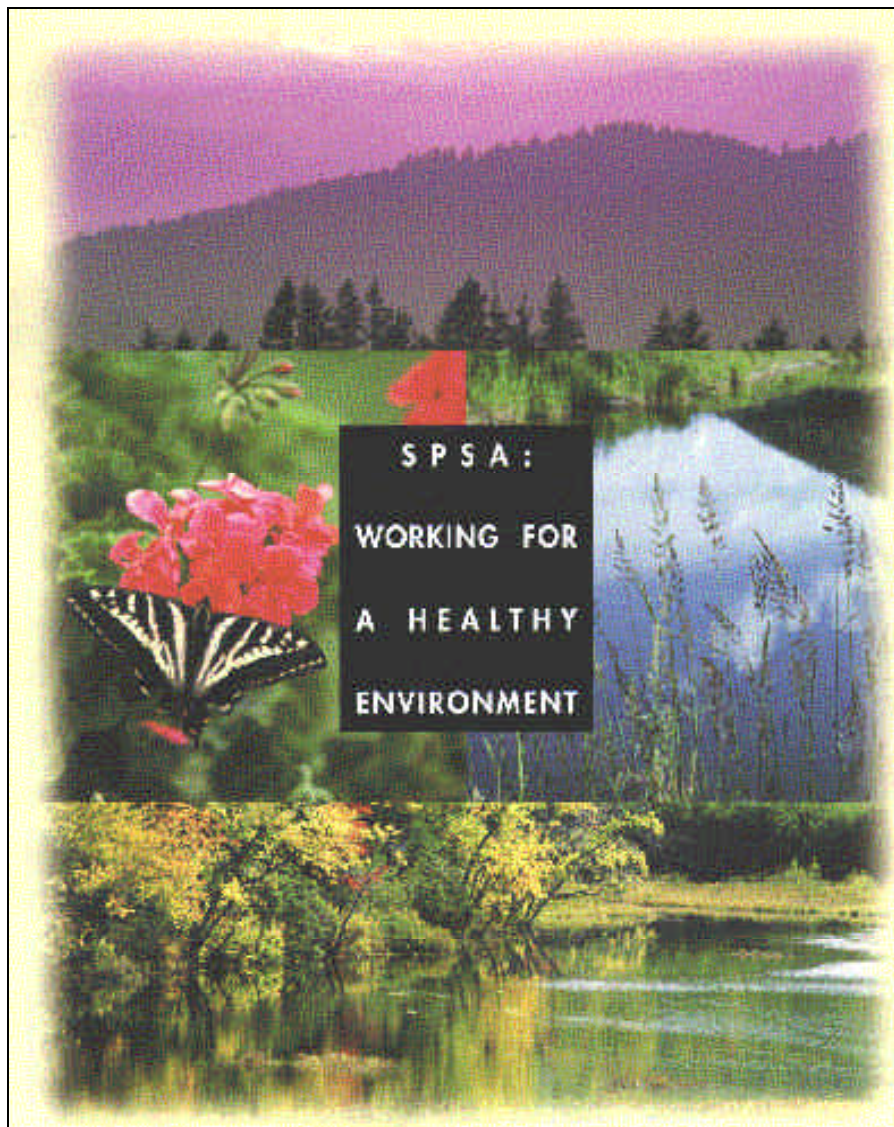


***The Southeastern Public Service Authority's***

**D&Q 62 Annual Progress Report**

**CY 2003**



Trash does not paint a pretty picture, but managing an integrated solid waste management system and turning trash into a resource, is a masterpiece. The Southeastern Public Service Authority (SPSA) is always looking for ways to improve our operations in an environmentally sound manner. At SPSA, it is our goal to manage and operate our solid waste collection, processing, and disposal programs and facilities in an environmentally responsible manner. Another goal at SPSA is to reduce the amount of waste deposited in our Regional Landfill and to increase the amount of waste recycled through our numerous programs. SPSA is striving to make every employee think environmentally with the development of our Environmental Management System (EMS). With all SPSA personnel thinking above and beyond, increased environmental awareness and pollution prevention techniques are sure to result.

As such, SPSA is privileged to be an E2 Participant in the DEQ Virginia Environmental Excellence Program. To further retain participation in our second year of the program, we respectfully submit to DEQ current achievements and improvements for 2003 and future projections for 2004.

#### **EMS Developments and General Environmental Improvements**

- The EMS Team at SPSA worked with an outside contractor in the first half of 2003 to finalize the lists of environmental aspects and to finalize Standard Operating Procedures (SOPs) throughout the company.
- Various EMS team members participated in a training video in October 2003 for EMS Awareness for use at SPSA and developed informational packages for distribution throughout all SPSA as well. Please find attached an EMS training packet for your information.
- EMS Awareness training began November 2003 and completed January 2004 for all SPSA personnel. The EMS Awareness Training for new hire orientation began in December 2003 and is implemented in all subsequent monthly sessions.
- SOPs were distributed to all SPSA personnel for implementation in November 2003. SOP Training began in December 2003 and is ongoing. SPSA's SOPs were implemented in January 2004.
- SPSA's Environmental Policy has been incorporated SPSA-wide, where the commitments of our policy with contact information for the respective EMS Team Representatives, is currently posted at designated areas at all SPSA facilities. The policy is also included in new employee orientation and is available on our external website. A copy of one of our policy commitments with EMS team member information is attached.

- The SPSA internal recycling initiative began February 2001, where recycling bins were placed at the following SPSA facilities: Regional Office Building, Power Plant, RDF Plant, Operations Building, Recycling Fleet and Administration Building, Suffolk Composting Facility, Virginia Beach Yard Waste Processing Facility, and the Regional Landfill. Currently, all facilities have recycling bins – a minimum of two at each, one for paper and one for co-mingled and they are removed on an as-needed basis. Participation continues to remain at 30% and it is our goal to increase to 50% by next year. SPSA Recycling personnel are currently tracking this through spreadsheets.
- As introduced in the 2002 E2 Report, SPSA personnel continue to conduct internal environmental inspections on a quarterly basis for multimedia facilities based on the facility's permits and regulatory requirements. All permitted SPSA facilities currently undergo these inspections.

### **Environmental Education and Outreach**

- SPSA sponsored the 2003 Earth Day Play Program at the Virginia Zoo with a performance of the "Trashanator," an original play about solid waste to learn more about the importance of recycling and environmental preservation and conservation. SPSA also participated in the regional Earth Day celebration at the Virginia Marine Science Museum; an Earth Day activity at one of our regional schools; and four additional performances of the "Trashanator" at various venues.
- SPSA gave 30 presentations to various schools and venues about our integrated solid waste management system during CY 2003. Twenty-four performances of "Trashanator" were also provided.

### **Household Hazardous Waste (HHW) Program**

- In addition to the existing eight HHW Collection facilities and eleven operating days, a new and separate facility was opened in December 2003 at the City of Virginia Beach Landfill and operates seven days a week. This increases the amount of HHW that does not enter Regional Landfill and increases the awareness and convenience of our program. During CY 2003, 6,181 residents participated, an increase from 5,905 in 2002. SPSA also processed 9,794 gallons of HHW Liquids and 10,124 pounds of HHW Solids during 2003, with 10,989 gallons and 10,729 pounds processed respectively during 2002.
- SPSA continues its partnership with A & B Propane (commercial propane business) to recycle propane cylinders and tanks. The cylinders are transported to A & B where propane is recovered and reused, and the cylinder is either reused or recycled as scrap metal. From January to December 2003, 2,374 propane cylinders were recycled.
- SPSA also continues its partnership with Inmetco to recycle alkaline batteries. The recycled components are used in the production of stainless steel remelt alloys. 350 lbs. of alkaline batteries were recycled during 2003.

- SPSA continues to partner with the Rechargeable Battery Recycling Corporation (RBRC) for the recycling of ni-cad batteries from portable electronic equipment for the manufacturing of new batteries and stainless steel products. In 2003, 146.5 lbs. of rechargeable batteries were recycled.
- SPSA continues to recycle lead acid batteries. During 2003, 2,683 lead acid batteries were recycled.
- SPSA continues to recycle freon cylinders and recover pure gas for recycling. In 2003, 1129 freon cylinders were collected for recycling.
- During 2003, SPSA recycled 33,110 gallons of used oil and 1,415 gallons of used antifreeze through our partnership with U.S. Filter.
- SPSA began a White Goods Program in July 2003, where ozone depleting gas (ODG) is removed and recycled. 1,461 tons of white goods and mixed metal products have been recycled that would have otherwise been disposed of in Regional Landfill.

### **Transfer Stations**

- SPSA established a “drop and hook” method at the Oceana Transfer Station in May 2003 and has expanded this operation to three more transfer stations: Isle of Wight, Franklin, and Chesapeake. The “drop and hook” method is where waste is loaded into empty trailers and stored onsite for SPSA tractor trailers to pick up for proper disposal. This method increases the efficiency of removing solid waste from tipping floor, decreases the idle time of SPSA tractor-trailers waiting to be filled, decreases the amount of time spent by commercial and residential users waiting to access the tipping floor, and thereby reduces vehicular emissions.

### **Regional Landfill**

- SPSA installed new and more powerful tire shredder in February 2004 to reduce or eliminate any long term stockpiling of used tires. This shredder will process approximately 500,000 waste tires per year in southeastern VA and may prove useful in removing illegal waste tire piles in the state.
- SPSA Regional Landfill has three ancillary facilities onsite with whom we partner for more environmentally sound operations:
  - Soilex Corporation - SPSA has partnered with Soilex Corporation since 1999 and Soilex treats petroleum contaminated soil through bioremediation and SPSA uses the treated material as an alternative daily cover. This practice reduces the amount of material landfilled and reduces the amount of virgin soil SPSA would have to use for cover. During 2003, 9100 cubic yards of material was used for daily cover.
  - Bi-Metals Corporation – SPSA has partnered with Bi-Metals Corporation since June 1988 and Bi-Metals Corporation receives ferrous metals from SPSA’s Waste-to-

Energy Facilities for recycling. During Fiscal Year 2003, 391 tons of ferrous metals were recycled.

- U.S. Energy Biogas Corporation – SPSA has partnered with U.S. Energy Biogas Corporation since 1991 and U.S. Energy Biogas has a landfill gas collection system in Cells I through IV of Regional Landfill, which is routed to two end users as alternative energy sources. One is Virginia Power, where 574,082,858 standard cubic feet (scf) was converted for electrical generation and transmitted in 2003 (a portion of that flow rate powers the U.S. Energy Biogas facility) and the other is CIBA Specialty Chemicals Corporation, where 375,323,820 scf was piped in 2003.

### **Waste-to-Energy**

- In March 2003, cameras were installed at SPSA's RDF Plant to reduce line wait times and subsequent vehicle emissions for drivers and to control tipping floor volumes. This installment is under investigation for future implementation at SPSA's Transfer Stations.

### **Recycling**

- SPSA's Document Destruction Program was introduced in SPSA's 2002 E2 Report. Since the inception of the program in February 2003, SPSA has serviced over 238 customers and converted 432, 280 lbs of materials into energy at SPSA's Waste-to-Energy Plant.
- SPSA and its member communities evaluated the implementation of an automated curbside recycling system that would increase recycling bin volumes from 18 gallons to 95 gallons. Two member communities are currently using the automated system with 90 gallon containers. Five member communities currently use the 18 gallon containers.
- SPSA has over 200 business recycling customers. During 2003, we retained an additional 29 customers.

### **Volunteer Improvements and Award Achievements**

- In March 2003, SPSA partnered with the City of Portsmouth in their Adopt-A-Spot Program to adopt a one-mile stretch near our Waste-to-Energy Complex. Four dates were scheduled throughout the year and SPSA employees volunteered to cleanup the area. Ninety-one bags containing 1,745 pounds of waste were collected during those events.
- The Regional Landfill received a silver pretreatment excellence award from HRSD in May 2003 for compliance during 2002. SPSA's Power Plant and RDF Plant were awarded two gold pretreatment excellence awards from HRSD for compliance during 2002. The RDF Plant also received the 2002 HRSD P2 Award. The P2 Award for outstanding pollution prevention efforts was based on the agency saving over \$366,000 in costs due to innovative techniques, reduced transportation, stormwater runoff

identification and screening, and the Paradise Creek Restoration tree planting with assistance from the Elizabeth River Project.

- In August 2003, SPSA planted wetlands grasses at an adjacent property in effort to continue restoration of Paradise Creek and as part of our participation in the Riverstars Program.
- SPSA received the SWANA (Solid Waste Association of North America) 2003 Solid Waste Management System Excellence Gold award in October 2003.
- SPSA received the “Businesses for the Bay” Pollution Prevention Award in the Outstanding Local Government Agencies Category in October 2003.
- SPSA received an Award of Environmental Excellence for our curbside and rolloff recycling program from the Norfolk Environmental Commission in November 2003.

### **The Forecast**

- SPSA’s EMS Team underwent auditor training and are scheduled to perform an internal audit of SPSA’s EMS system in March and April 2004. SPSA currently targets full ISO 14001 certification by late summer 2004.
- SPSA began construction on the Suffolk Transfer Station at Regional Landfill in April 2003. Construction began in April 2003 with an anticipated completion date of December 2004. Incoming processable waste at Regional Landfill that is now currently being landfilled will be diverted to Waste-to-Energy at an approximated 50,000 tons per year.
- Regional Landfill will begin sideslope closure on 72 acres of Cells I – IV in March 2004, which will further enhance the integrity of the tomb, reduce erosion and sedimentation, and protect groundwater supplies.
- SPSA is planning to consolidate our two yard waste facilities at one location, which will increase the productivity of operations and reduce transportation. Construction will begin in April or May 2004 with an estimated completion date of September 2004. The actual consolidation process, which includes moving Suffolk Composting Facility to the new site, is estimated to be complete by the end of February 2005.
- SPSA is planning to implement an eddy current system at the Power Plant to remove nonferrous metals from the ash end product for recycling by April 2004. The RDF Plant will also incorporate an eddy current system, extracting nonferrous metals from the waste stream, in 2005.
- U.S. Energy Biogas Corporation is scheduled to begin installation of an active landfill gas collection system in Cell V of Regional Landfill in early summer 2004. They are actively looking for an end user of this landfill gas as an energy source.

- SPSA is currently evaluating implementation of a large-scale white goods collection and freon recovery service for all member communities.
- SPSA and HRSD are investigating the feasibility of reusing effluent from one of HRSD's POTW plants for all non-potable water uses at SPSA's Power Plant.
- SPSA is actively looking for additional end users of our waste-to-energy steam. Currently, the Norfolk Naval Shipyard and Virginia Power are end users.